



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	EVERETT, WA	<b>Accident Number:</b>	SEA98LA085
<b>Date &amp; Time:</b>	06/03/1998, 1732 PDT	<b>Registration:</b>	N98NT
<b>Aircraft:</b>	Piper PA-30	<b>Aircraft Damage:</b>	Minor
<b>Defining Event:</b>		<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

The pilot taxied the twin engine PA-30 (90 gallon fuel capacity) to a self service fueling island. There, he fueled the aircraft with 58.15 gallons of fuel at 1503. The aircraft was taxied back to the pilot's hangar area. Sometime thereafter, the pilot had used a jumper cable to connect the battery of his car to the aircraft's electrical system at the power receptacle located on the left side of the nose. Approximately 1732, with both engines running, the pilot exited the aircraft to remove the chock from the nose-wheel during which the aircraft rolled forward (east) and eventually impacted a parked Cessna primarily along its leading edge of the right wing. The PA-30's right engine stopped upon wing contact, and the momentum carried both aircraft in a clockwise arc a short distance southeast. The PA-30's left engine continued running after the collision. At a point consistent with the PA-30's initial contact with the Cessna, a pool of blood identified the spot where the pilot was first struck by the PA-30's left propeller. He drug himself under the PA-30 and into a 4:30 position stopping at a point close to the nose-wheel chock which was entangled in the jumper cables. A witness who spoke with the pilot reported that he remarked that 'I knew better, (unknown) was not removed, and the wind caught me.' The pilot was airlifted to a major hospital and expired approximately 10 hours later.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot-in-command's exiting the aircraft with both engines running to remove a wheel chock. A factor was the inadequate preflight of the aircraft (not removing the chock) prior to engine start.

## Findings

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Occurrence #1: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: OTHER

### Findings

1. (C) AIRCRAFT UNATTENDED/ENGINE(S) RUNNING - ATTEMPTED - PILOT IN COMMAND
2. (F) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

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Occurrence #2: PROPELLER/ROTOR CONTACT TO PERSON

Phase of Operation: STANDING - ENGINE(S) OPERATING

## Factual Information

### HISTORY OF ACCIDENT

On June 3, 1998, approximately 1732 Pacific daylight time, a Piper PA-30, N98NT, registered to and being operated by a commercial pilot, sustained minor damage when it collided with a parked/unoccupied Cessna 150G (N3290J) on the ramp at the Snohomish County (Paine) Field airport, Everett, Washington. The pilot of the PA-30, who was outside his aircraft at the time of the accident, was initially seriously injured. Visual meteorological conditions existed, and no flight plan had been filed. The flight, which was to have been operated under 14CFR91, was believed to have been intended as a personal flight.

Although no flight plan had been filed, the FAA inspector on site found a fuel slip within the aircraft indicating that a fuel load of 58.15 gallons of 100 low lead aviation fuel was loaded into the aircraft at 1503 hours earlier on the day of the accident. This was accomplished at the self-service fueling point at Flightline, a fixed base operator. There were no witnesses to the fueling, therefore, it is not known whether the pilot hot-fueled the aircraft or shut down the engines prior to the fueling.

The accident site is not within visual line of site of the Paine Field tower.

A pilot pre-flighting his Cessna at the north end of the row of parked aircraft on the ramp, noticed the Piper entangled with the Cessna with its left engine running, and the Piper pilot lying on the ground in the Piper's approximate 4:30 position. He rendered assistance to the pilot, who was conscious at the time and notified the tower of the event as well as the amputation of the Piper pilot's left leg (refer to attached statement and diagrams).

After instructions from the injured pilot, the passenger accompanying the Cessna pilot entered the PA-30 and shut down the running engine (the right engine had stopped operating upon impact with the Cessna right leading edge) (refer to photograph 1). The passenger also stated that the Piper pilot stated "I knew better, (unknown) was not removed, and the wind caught me" (refer to attached statement and diagrams).

A pool of blood on the asphalt was observed just aft of the trailing edge of the left wing of the PA-30. A single blood smear originating at the pool of blood and progressing generally south under the aircraft's fuselage and paralleling the trailing edge of the left flap was observed (refer to photograph 3). Just aft of the right flap and near the wing root area, blood was noted on the fuselage and inboard flap corner. The blood smear made an abrupt 90 degree change moving out away from the aircraft in the 4:30 position and terminating at the pilot's location when he was found (refer to photograph 1 and 3).

Several members from the Snohomish County operations department arrived on site and reported that the Cessna pilot reported to them that he had found the wheel chock from the Piper entangled in a set of jumper cables wrapped around it near the accident site. The cables, with a single red and green alligator clip at one end and a female plug at the other was removed from the chock and placed on the right wing of the Piper near the cabin door (refer to photograph 1 and 3, and statement of SnoCo airport with attached diagram).

An Airlift Northwest medevac helicopter arrived at 1756 and departed at 1811 with the injured pilot, to Harborview Medical Center in Seattle, where he subsequently expired on the morning of June 4.

Personnel employed at Paine Field reported that the pilot kept his aircraft in a local hangar and that the doors to the hangar were found closed with the aircraft collision located nearby.

On-site examination by an inspector from the Federal Aviation Administration (FAA) revealed that the PA-30 pilot's personal auto was parked alongside the east face of the hangar with its hood opened (refer to photograph 4). Closer inspection within the auto's engine compartment revealed fresh scratch marks on the terminals of the auto's battery characteristic of alligator clamps having been applied to the terminals. The female plug attached to one end of the jumper cables was found to mate with the aircraft's external power application socket located on the left side of the nose of the aircraft.

#### PERSONNEL INFORMATION

The pilot's medical record was examined. He had been issued a second class medical certificate on August 28, 1996. The only restriction noted was the requirement to wear corrective lenses. There was no record of any coronary problems. The pilot's flight logs were not obtained and his total flight time of 14,000 hours was what he reported at his most recent FAA medical examination.

#### AIRCRAFT INFORMATION

The aircraft received its last inspection (annual) on September 1, 1996, and had accrued approximately 39 hours of Hobbs time since that inspection when the accident occurred. The aircraft's total fuel capacity was 90 gallons of which 6 was unusable.

#### METEOROLOGICAL INFORMATION

Winds recorded at the Snohomish County airport at 1745 on the date of the accident were reported as 220 degrees magnetic at 10 knots with no gusts reported.

#### MEDICAL AND PATHOLOGICAL INFORMATION

The pilot was airlifted via helicopter to Harborview Medical Center in Seattle approximately 18 nautical miles south of accident site. He subsequently expired approximately 0400 the following day.

Post mortem examination was conducted by Richard C. Harruff, M.D., Ph.D., at the facilities of the King County Medical Examiner's Office, Seattle, Washington, on the morning of June 4, 1998. According to Dr. Harruff's autopsy report "the cause of death is traumatic amputation of lower extremity due to sharp force injury of lower extremities." Additionally, he reported that "

A contributing cause is atherosclerotic cardiovascular disease with severe coronary atherosclerosis and scarred myocardial infarct."

A toxicological (blood ethanol) examination of a blood sample from the pilot yielded negative results.

## Pilot Information

<b>Certificate:</b>	Flight Instructor; Commercial	<b>Age:</b>	60, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land; Single-engine Sea	<b>Seat Occupied:</b>	Unknown
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	08/28/1996
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	14000 hours (Total, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N98NT
<b>Model/Series:</b>	PA-30 PA-30	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	30-927
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	09/01/1996, Annual	<b>Certified Max Gross Wt.:</b>	3600 lbs
<b>Time Since Last Inspection:</b>	39 Hours	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	3049 Hours	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-320-B1A
<b>Registered Owner:</b>	PORTER, FRANK. L.	<b>Rated Power:</b>	160 hp
<b>Operator:</b>	PORTER, FRANK. L.	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PAE, 606 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1745 PDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 15000 ft agl	Visibility	50 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	19° C / 13° C
Precipitation and Obscuration:			
Departure Point:	(PAE)	Type of Flight Plan Filed:	None
Destination:	UNKNOWN	Type of Clearance:	None
Departure Time:	0000	Type of Airspace:	

## Airport Information

Airport:	SNOHOMISH COUNTY (PAE)	Runway Surface Type:	
Airport Elevation:	606 ft	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

## Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Minor
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	STEVEN A MCCREARY	Report Date:	02/15/2001
Additional Participating Persons:	CHUCK COX; RENTON, WA		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).